

# The Role of Health Information Technology in Implementing Disease Management Programs

Donald F. Wilson, MD

Medical Director

Quality Insights of  
Pennsylvania

May 11, 2006

# Statewide Combined Topic Average (CTA) Calculations

| Claims Results (FFS)          |                                |                                |                                 |                                 |                                  |                                     |                                      |                                      |  |
|-------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|--|
| Indicator                     | Baseline<br>4/1999-<br>12/2002 | Interim 1<br>7/2000-<br>6/2002 | Interim 2<br>10/2000-<br>9/2002 | Interim 3<br>1/2001-<br>12/2002 | Interim 4<br>4/1/02 -<br>3/31/03 | Interim 5<br>7/1/2001-<br>6/30/2003 | Interim 6<br>10/1/2001-<br>9/30/2003 | Interim 7<br>1/1/2002-<br>12/31/2003 | Re-<br>measure<br>4/1/2002-<br>3/31/2004 |
| <b>Breast Cancer</b>          | 59.7%                          | 59.4%                          | 60.0%                           | 60.6%                           | 60.4%                            | 59.5%                               | 59.2%                                | 59.8%                                | 59.6%                                    |
| <b>Biennial Eye Exam</b>      | 70.9%                          | 70.3%                          | 70.3%                           | 70.6%                           | 70.4%                            | 70.1%                               | 70.0%                                | 69.7%                                | 69.2%                                    |
| <b>Biennial Lipid Profile</b> | 79.0%                          | 83.1%                          | 83.9%                           | 84.8%                           | 85.2%                            | 85.5%                               | 85.8%                                | 86.1%                                | 86.1%                                    |
| <b>Annual Hemoglobin A1c</b>  | 79.7%                          | 81.7%                          | 82.4%                           | 83.4%                           | 83.6%                            | 83.8%                               | 83.9%                                | 84.3%                                | 84.3%                                    |

# Why are we doing so poorly?

## The IOM Quality Chasm report says:

- “The current care systems **cannot** do the job.”
- “Trying harder will not work.”

# Usual Chronic Illness Care

- Oriented to acute illness
- Focus on symptoms and lab results
- Patient's role in management not emphasized
- Care dependent on provider's memory and time
- Interaction often not productive, and frustrating for both patient and doctor

# How would I recognize a productive interaction?



## **Patient needs are met**

- **Assessment**
- **Tailored clinical management**
- **Collaborative goals, problem-solving, and plan**
- **Sustained follow-up and continuity**

# Chronic Care Model



# Clinical Information System: Registry

- A database of clinically useful and timely information on all patients, provides reminders, embedded decision support, care tracking and facilitates care planning for individuals or populations
- Allows for performance monitoring of practice team and care system

# Fostering Rapid Advances in Care

- The IOM report called for significant reforms in the practice of medicine,....
- HHS should lead demonstration projects to stimulate innovation in the adoption of IT systems in health care.

• November 19, 2002



# 8th Scope of Work

## DOQ-IT Objectives

- Foster the implementation of EHR systems in small-to-medium sized physician offices
- Assist offices in workflow re-design and quality improvement training
- Implement care management and patient self-management processes
- Performance feedback to help physicians identify potential areas for improvement

# National Collaboration & Partnerships

- AAFP, Center for Health Info. Tech., QI Leadership
- American Medical Association(AMA) Physician Consortium for Practice Improvement
- National Diabetes Quality Improvement Alliance
- National Committee for Quality Assurance (NCQA)
- Pacific Business Group on Health
- American College of Physicians

# Measurement Strategy

- Practice agrees to collect data using CMS / vendor specifications.
- QIO provides assistance in migration to EHR and data capture.
- Create monthly reporting process to monitor practice progress.
- QIO provides assistance in transmission of data to National Data Repository for Self Evaluation, Public Reporting and Pay for Performance Initiatives

# Installing an EHR



# Physician Office Quality Measures

- **Coronary Artery Disease (CAD)**
  - Antiplatelet Therapy
  - Drug Therapy for Lowering LDL Cholesterol
  - Beta-Blocker Therapy-Prior MI
  - Blood Pressure
  - Lipid Profile
  - LDL Cholesterol Level
  - ACE Inhibitor Therapy

# Physician Office Quality Measures

- **Diabetes Mellitus (DM)**
  - HbA1c Management
  - HbA1c Management Control
  - Blood Pressure Management
  - Eye Exam
  - Lipid Measurement
  - LDL Cholesterol Level
  - Urine Protein Testing
  - Foot Exam

# Physician Office Quality Measures

- **Heart Failure (HF)**

- **Left Ventricular Function (LVF) Assessment**
- **Left Ventricular Function (LVF) Testing**
- **Weight Measurement**
- **Blood Pressure Screening**
- **Patient Education**
- **Beta-Blocker Therapy**
- **ACE Inhibitor Therapy**
- **Warfarin Therapy for Patients with Atrial Fibrillation**

# Physician Office Quality Measures

- **Hypertension (HTN)**
  - Blood Pressure Screening
  - Plan of Care
  - Blood Pressure Control



# Physician Office Quality Measures

- **Preventive Care (PC)**
  - **Blood Pressure Measurement**
  - **Colorectal Cancer Screening**
  - **Influenza Vaccination**
  - **Pneumonia Vaccination**
  - **Lipid Measurement**
  - **LDL Cholesterol Level**
  - **Tobacco Use**
  - **Tobacco Cessation**
  - **Breast Cancer Screening**

**PVRP**

# Wilson's Hypothesis

$$\uparrow \text{HIT} + \text{P4P} = \triangle \text{DM}$$